

**AUTOMATIC FIRE SUPPRESSION SYSTEM
COVERAGE IN CONCEALED INTERSTITIAL SPACES****IR 9-1****References:**

California Code of Regulations (CCR), Title 24, Part 2: California Building Code (CBC).
 2001 CBC, Section 904
 2007 and 2010 CBC, Section 903
 National Fire Protection Association (NFPA) 13
 2002 Edition: Section 8.14.1.1
 2010 Edition: Section 8.15.1

Revised 01-12-11
 Issued 10-15-07

Discipline: Fire and Life Safety

This Interpretation of Regulations (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA which includes State of California public elementary and secondary schools (grades K-12), community colleges, and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IRs. Only IRs listed in the document at <http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx> at the time of plan submittal to DSA are considered applicable.

Purpose: The purpose of this Interpretation of Regulations (IR) is to state the minimum requirements of and provide guidance for applying NFPA 13, Section 8.14.1.1 – (2002 Edition) and NFPA 13, Section 8.15.1 (2010 Edition) as it relates to fire sprinklers coverage in concealed interstitial spaces.

1. GENERAL:

1.1 NFPA 13 8.14.1.1 (2002 Edition) All concealed spaces enclosed wholly or partly by exposed combustible construction shall be protected by sprinklers except in non-combustible concealed spaces where sprinklers are not required to be installed by NFPA 13, Sections 8.14.1.2.1 through 8.14.1.2.15.

1.2 NFPA 13 8.15.1.2.1 (2010 Edition) Concealed spaces of noncombustible or limited combustible construction with minimal combustible loading having no access shall not require sprinkler protection. See NFPA 13, Sections 8.15.1.2.1.1 through 8.15.1.2.15.

2. FIRE SPRINKLER REQUIREMENTS FOR INTERSTITIAL SPACES: “Limited-combustible” materials for these spaces must meet the 50 flame spread, and meet provisions of 2010 CBC Definitions Chapter 2 and NFPA 3.3.13 and 3.3.14 (2010 Edition). Data cables must meet 2010 CEC Section 800-26 as resistant to the spread of fire.

2.1 Fire Sprinklers Required: Unless specifically noted in the exceptions shown in the NFPA 13 2002 and 2010 Editions, all areas not meeting the NFPA 13 criteria, shall have fire sprinklers installed. Any amount of combustible materials or exposed combustible construction will require the installation of fire sprinklers.

2.2 Sprinklers Used in Lieu of One-Hour Fire Resistive Construction: Areas in a building that require fire-resistive construction to meet the requirements of Chapter 6, shall have automatic fire sprinklers installed where required by CBC Table 601 of Chapter 6. The entire building, including non-combustible interstitial spaces, must have sprinklers installed, to provide equivalent protection. Sprinkler omissions allowed by NFPA 13 are not permitted.

2.3 Sprinklers not required: Interstitial spaces need not have the fire sprinklers (as noted in NFPA 13) if all the following conditions are met:

- All items within an interstitial space meet the definition of limited combustible or non-combustible, and
- The space itself is of non-combustible construction, and
- The fire sprinkler system is not used in lieu of one-hour fire resistive construction.